

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4994 (1968): Forceps, Redressing, Walsham's, Right, Left and Straightening [MHD 4: Ear, Nose and Throat Surgery Instruments]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



IS: 4994 - 1968

Indian Standard

**SPECIFICATION FOR
ORCEPS, REDRESSING, WALSHAM'S, RIGHT,
LEFT AND STRAIGHTENING**

UDC 615.472.4



IS: 4994 - 1968

Indian Standard
**SPECIFICATION FOR
FORCEPS, REDRESSING, WALSHAM'S, RIGHT,
LEFT AND STRAIGHTENING**

UDC 615.472.4



© Copyright 1969

**INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1**

June 1969

AMENDMENT NO. 1 JANUARY 1979
TO
IS : 4994-1968 SPECIFICATION FOR
FORCEPS, REDRESSING, WALSHAM'S, RIGHT,
LEFT AND STRAIGHTENING

Alteration

(*Pages 4 and 7, clauses 7.1 and 7.1.1*) — Substitute the following for the existing clauses:

'7.1 Corrosion Resistance — The instrument shall satisfy the boiling and autoclaving test as specified in IS : 7531-1975†.'

Addendum

(*Page 4, foot-note with ' * ' mark*) — Add the following new foot-note after ' * ' mark:

†Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments.'

(CPDC 26)

Printed at New India Printing Press, Khurja, India

SHRI MAHESH M. SHAH
MAJ SOHAN SINGH

SHRI K. L. TALWAR

SHRI A. N. VIG

SHRI R. N. VIG (*Alternate*)

SHRI A. B. RAO,

Director (Consr Prod) (*Secretary*)

Shah Medical & Surgical Co Ltd, Baroda
Directorate General of Inspection (Ministry of
Defence)

Chief Inspectorate of General Stores [Ministry of
Defence (DGI)], Kanpur

ISCOMED Industries Private Ltd, Bombay

Director General, ISI (*Ex-officio Member*)

(*Continued on page 2*)

Indian Standard

SPECIFICATION FOR FORCEPS, REDRESSING, WALSHAM'S, RIGHT, LEFT AND STRAIGHTENING

Surgical Instruments Sectional Committee, CPDC 11

Chairman

COL R. D. AYYAR

Representing

Ministry of Health, Family Planning & Urban Development

Members

CHIEF SALES MANAGER

WORKS MANAGER (*Alternate*)

SHRI R. D. GUPTA

Indian Drugs and Pharmaceuticals Ltd, New Delhi

National Metallurgical Laboratory (CSIR), Jamshedpur

DR (KUMARI) S. D. GUPTA

Lady Hardinge Medical College & Hospital, New Delhi

BRIG IQBAL CHAND

Directorate General of Armed Forces Medical Services (Ministry of Defence)

SHRI G. B. JAKHETIA

Development Commissioner, Small Scale Industries

SHRI V. KRISHNAMOORTHY

Directorate General of Technical Development (Ministry of Industrial Development & Company Affairs)

SHRI K. MANIVANNAN

Directorate of Industries, Government of Haryana

SHRI SANTI KUMAR MUKERJI

H. Mukerji & Banerjee Surgical Pvt Ltd, Calcutta

SHRI M. G. PANDIT

Ministry of Health, Family Planning & Urban Development

DR A. RAMDAS

Ministry of Railways

SHRI S. SEN GUPTA

Baruipur Surgical Instrument Centre (Directorate of Industries, Government of West Bengal)

SHRI MAHESH M. SHAH

Shah Medical & Surgical Co Ltd, Baroda

MAJ SOHAN SINGH

Directorate General of Inspection (Ministry of Defence)

SHRI K. L. TALWAR

Chief Inspectorate of General Stores [Ministry of Defence (DGI)], Kanpur

SHRI A. N. VIG

ISCAMED Industries Private Ltd, Bombay

SHRI R. N. VIG (*Alternate*)

SHRI A. B. RAO,

Director General, ISI (*Ex-officio Member*)

Director (Consr Prod) (*Secretary*)

(Continued on page 2)

IS : 4994 - 1968

(Continued from page 1)

Precision Type Surgical Instruments Subcommittee, CPDC 11:5

Convener

DR J. L. GUPTA

Representing

Safdarjang Hospital, Central Government Health Scheme (Ministry of Health, Family Planning & Urban Development), New Delhi

Members

DR JACOB CHANDI

DR G. S. GOPALAN

SHRI G. JAYA PRASAD (Alternate)

DR GOPI NATH

BRIG IQBAL CHAND

SHRI SANTI KUMAR MUKERJI

SHRI H. C. MUKHERJEE

SHRI J. PRABHAKAR

DR. T. T. RAMALINGAM

DR P. B. RAO

Christian Medical College, Vellore

Jaya Surgicals, Madras

**All India Institute of Medical Sciences, New Delhi
Directorate General of Armed Forces Medical Services
(Ministry of Defence)**

**H. Mukerji & Banerjee Surgical Pvt Ltd, Calcutta
Chief Inspectorate of general Stores [Ministry of
Defence (DGI)], Kanpur**

**Indian Drugs & Pharmaceuticals Ltd, Madras
In Personal Capacity (4-A Kilpauk Garden Road,
Kilpauk, Madras)**

Jawaharlal Institute of Post-Graduate Medical Education & Research, Pondicherry

Indian Standard

SPECIFICATION FOR FORCEPS, REDRESSING, WALSHAM'S, RIGHT, LEFT AND STRAIGHTENING

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 27 December 1968, after the draft finalized by the Surgical Instruments Sectional Committee had been approved by the Consumer Products Division Council.

0.2 The formulation of Indian Standards on surgical instruments has been taken up at the instance of the Advisory Committee for Development of Surgical Instruments, Equipment and Appliances, Government of India.

0.3 This standard is one of a series of Indian Standards on surgical instruments. Other specifications published so far in the series appear at P 8.

0.4 This standard contains clause 8.1 which calls for an agreement between the purchaser and the supplier.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard covers the requirements of Walsham's redressing forceps, right, left and straightening.

2. MATERIAL

2.1 The forceps shall be made from stainless steel conforming to Designation 30 Cr 13 of Schedule V of IS : 1570-1961†.

2.2 The screws shall be of stainless steel conforming to Designation 30 Cr 13 or 20 Cr 18 Ni 2 of Schedule V of IS : 1570-1961†.

*Rules for rounding off numerical values (*revised*).

†Schedules for wrought steels for general engineering purposes.

3. SHAPE AND DIMENSIONS

3.1 The forceps shall conform to shapes and dimensions as given in Fig. 1 and 2.

3.2 Joint — The joint of the forceps shall be recessed screw joint as given in Fig. 1 and 2 or box joint. The other requirements of the joint shall be the same as prescribed in 6 of Section 2 of IS : 3642-1966*.

4. WORKMANSHIP AND FINISH

4.1 The instrument shall be free from cracks, seams, burrs, flaws and other defects. The surface shall be finished smooth and bright. The forceps shall be of a symmetrical and balanced construction and both arms shall match.

5. HEAT TREATMENT

5.1 The forceps shall be uniformly hardened and tempered throughout. The hardness shall be 360 to 400 *HV*.

6. MARKING

6.1 Each forcep shall be clearly and indelibly marked with the manufacturer's name, initials or trade-mark. The word 'SS' shall also be marked on the handle. The forceps shall be marked with the letters 'R', 'L' and 'S' for indicating right, left and straightening forceps.

6.1.1 Each forcep may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

7. TESTS

7.1 Corrosion Resistance Test — The forceps shall be tested for corrosion resistance as given in 7.1.1.

*General requirements for surgical instruments.

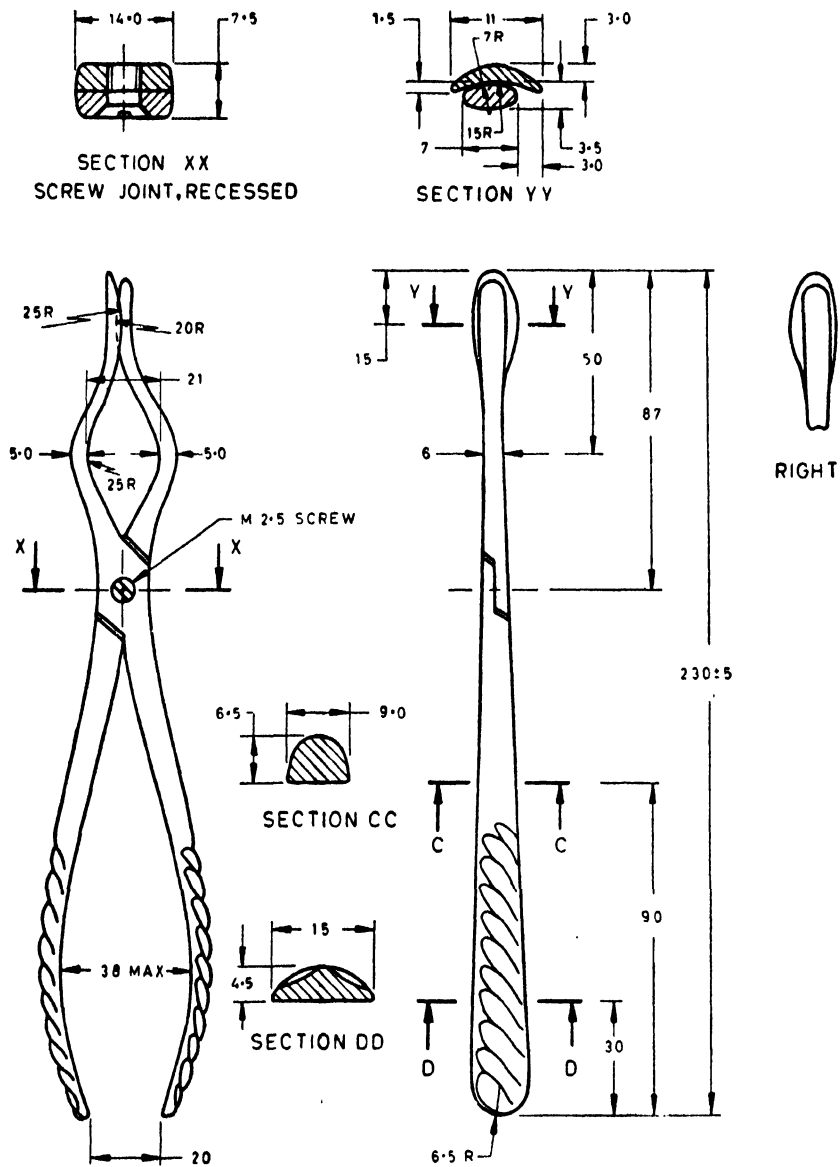
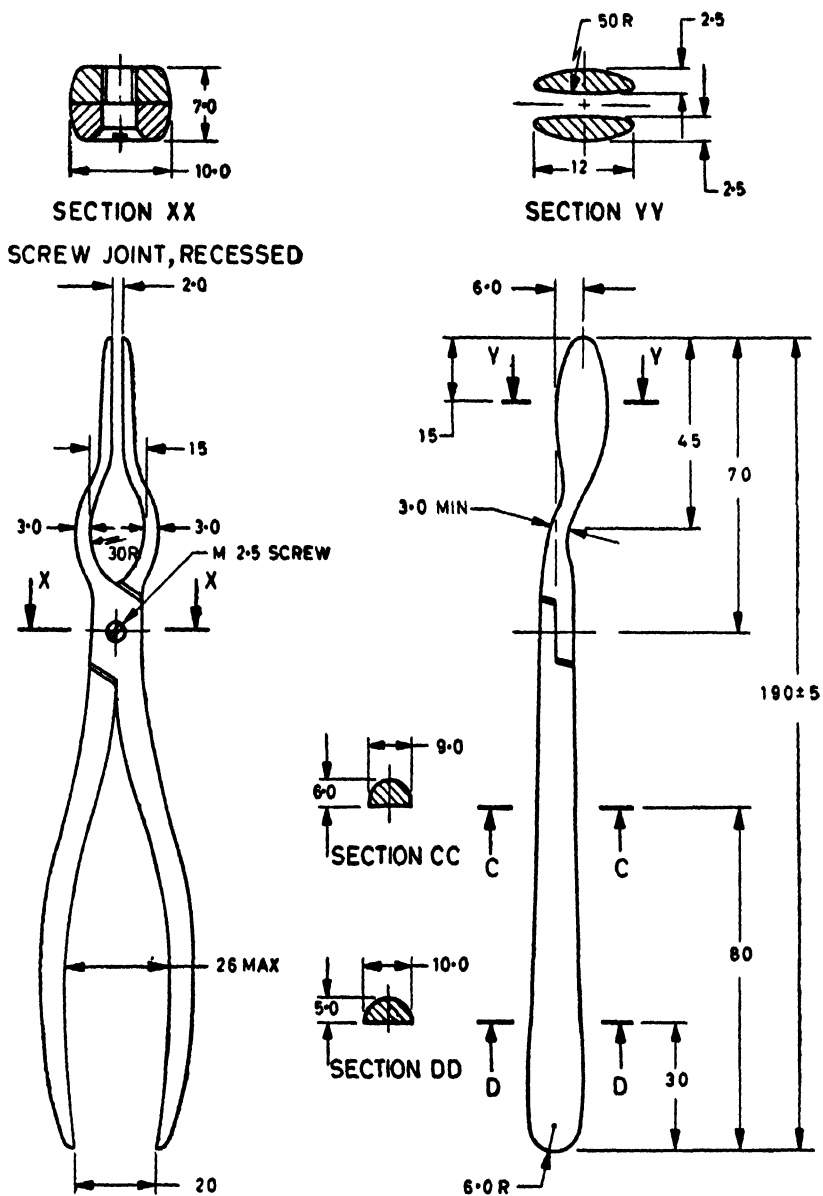


FIG. 1 WALSHAM'S REDRESSING FORCEPS, LEFT AND RIGHT



All dimensions in millimetres.

FIG. 2 WALSHAM'S REDRESSING FORCEPS, STRAIGHTENING

7.1.1 Copper Sulphate Test—The sample shall be scrubbed with soap and warm water, rinsed in hot water followed by a dip in ethyl alcohol (95 percent) and dried. The sample shall be completely immersed in copper sulphate solution at room temperature for six minutes and then washed off with fresh water or wet cotton wool. The copper sulphate solution shall be made up as follows:

Copper sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)	4.0 g
Sulphuric acid (H_2SO_4) (sp gr 1.84)	10.0 g
Water (H_2O)	90.0 ml

There shall be no red stains or spots on the sample after the test but the polished surface getting dull may be permitted.

8. PACKING

8.1 The forceps shall be packed as agreed to between the purchaser and the supplier or wrapped in moisture-proof polyethylene bag and then packed in suitable cardboard box or plastic case.

INDIAN STANDARDS

ON

Surgical Instruments

IS:	Rs
3317-1965 Needles, hypodermic	2-50
3318-1965 General requirements for surgical scalpels and knives ...	1-00
3319-1965 Surgical scalpels with detachable blades (Bard Parker type) ...	3-00
3320-1965 Surgical scalpels	1-00
3642-1966 General requirements for surgical instruments ...	2-50
3643-1966 Dissecting forceps (serrated and toothed) ...	2-00
3644-1966 Artery forceps (Halsted's Mosquito pattern) ...	1-50
3645-1966 Artery forceps (Spencer Wells pattern) ...	1-50
3758-1966 Hooks, aural	1-50
3759-1966 Blades, skin grafting	1-00
3760-1966 Probe, aural, Jobson Horne's pattern ...	1-00
3767-1966 Hook, Skin, Gillies pattern	1-00
3787-1966 Gag, mouth, cleft palate	1-50
3788-1966 Specula, aural	1-50
3799-1966 Forceps, aural and nasal, crocodile action ...	2-00
3807-1966 Forceps, dressing, aural and nasal ...	1-50
4085-1967 Knives, amputating	2-00
4089-1967 Forceps, clip removing Michel pattern ...	2-50
4094-1967 Forceps, sterilizer (Cheate's pattern) ...	2-50
4244-1967 Retractors, skin, double ended	2-00
4245-1967 Needle holder (Gillies) combined with scissors, for plastic surgery ...	2-50
4275-1967 Scissors, Kilner's for plastic surgery ...	2-50
4281-1967 Scissors, McIndoe's, for plastic surgery ...	3-50
4282-1967 Forceps, dissecting, plastic surgery	3-50
4487-1968 Forceps, tonsil artery (Birkett's pattern) ...	2-50
4488-1968 Forceps, tonsil holding (Muck's and White's patterns) ...	2-50
4489-1968 Forceps, nasal turbinate, Luc's	2-00
4490-1968 Forceps, dilating, Trousseau's	2-00
4504-1968 Forceps, peritonsillar	2-00
4513-1968 Scissors, surgical dressing and stitch... ..	2-50
4514-1968 Forceps, tonsil dissecting (Waugh's pattern) ...	2-50
4520-1968 Forceps, punch, nasal (Citelli's antrum and Hajek's sphenoidal) ...	2-50
4569-1968 Scissors, eye	5-00
4788-1968 Knife, eye, capsulotomy (Ziegler's pattern) ...	2-00
4789-1968 Knife, eye, cataract (Graefe's)	2-00
4790-1968 Knife, eye, corneal splitting (Lang's and Tooke's pattern) ...	2-50
4959-1968 Raspatory, nasal, Howarth's	2-00
4978-1968 Forceps, eye, fixation (toothed)	3-50

PUBLICATIONS OF INDIAN STANDARDS INSTITUTION

INDIAN STANDARDS

About 5000 Indian Standards, broadly classified under the following main heads, have been issued so far:

Agriculture & Food
Chemical
Civil Engineering
Consumer Products

Electrotechnical
Mechanical Engineering
Structural & Metals
Textile

Of these, the standards belonging to the Consumer Products Group fall under the following categories:

Anaesthesia, Resuscitation & Allied Equipment
Artificial Limbs
Coir
Dental Equipment and Instruments
Domestic Hardware
Fasteners for Consumer Goods
Fountain Pens and Ball Point Pens
Gas Burning Appliances

Hospital Equipment
Hospital Utensils
Medical Glass Instruments
Oil Burning Appliances
Safety Matches
Sports Goods
Surgical Instruments and Dressings
Umbrellas
Utensils and Cutlery

OTHER PUBLICATIONS

	Rs
ISI Bulletin (Published Every Month)	
Single Copy	3-00
Annual Subscription	25-00
Annual Reports (from 1948-49 Onwards)	2-00 to 3-00 each
Handbook of ISI Publications, 1968	5-00

Available from

INDIAN STANDARDS INSTITUTION

Headquarters

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 1

Telephones 27 36 11 - 20

Telegrams Manaksanstha

Branch Offices

Telegrams Manaksanstha

534 Sardar Vallabhbhai Patel Road
5 Chowringhee Approach
5-9-201/2 Chirag Ali Lane
117/418 B Sarvodaya Nagar
54 General Patters Road

Bombay 7
Calcutta 13
Hyderabad 1
Kanpur 5
Madras 2

Telephone 35 89 44
.. 23-18 23
.. 3 23 35
.. 6 76 95
.. 8 72 78